

I claim:

1. A method for improving cognitive function of a fetus in utero in a woman;  
 5 comprising the steps of:  
     determining a pattern of sonic variations, said pattern comprising a plurality of  
     sequences of tones, each sequence being repeated at a predetermined tempo; and  
     transmitting each of said sequences of tones in soundwave form to said fetus  
     during different periods within the term of the pregnancy,  
 10 wherein said tempo at which each subsequent said sequence of tones is repeated is  
     selected to be increased during the term of the pregnancy.
2. The method of claim 1 further comprising the step of:  
     determining an in utero maternal baseline tone;  
 15 wherein each of said tones in said sequence of tones is said in utero maternal  
     baseline tone.
3. The method of claim 1 further comprising the step of:  
     determining an in utero maternal baseline tone,  
 20 wherein each of said tones in said baseline tone is said in utero maternal baseline  
     tone or a tonal variation from said in utero maternal baseline tone.
4. The method of claim 3 wherein at least one of said tonal variations is a tone  
     which is two whole notes higher than said in utero maternal baseline tone.  
 25
5. The method of claim 4 wherein at least one of said tonal variations is a tone  
     which is four whole notes higher than said in utero maternal baseline tone.
6. The method of claim 3 wherein said tones in subsequent sequences of tones  
 30 have increased tonal variations from the in utero maternal baseline tone.

7. The method of claim 2 wherein said step of determining an in utero maternal baseline tone comprises the steps of:

inserting a microphone through a cervix of said woman; and  
recording sounds from said microphone inserted in said woman.

5

8. The method of claim 7 wherein said pattern of sonic variations is determined by adjusting a tone of a digital sampling of said recorded sounds; and

comparing said pattern of sonic variations received at the womb wall after transmission to said fetus with said transmitted pattern of sonic variations.

10

9. The method of claim 1 further comprising the step of:

storing said pattern of sonic variations in an electronic integrated circuit.

15

10. The method of claim 9 wherein said transmitting step comprises transmitting said stored plurality of patterns from said electronic integrated circuit to said fetus with a sonic transducer.

20

11. The method of claim 1 wherein said transmitting step comprises positioning a transmission means proximate to said woman's abdomen and transmitting said sequence of tones by said transmission means through an abdominal wall of said woman to said fetus.

Sub, B' > 12. A method for adjusting cognitive function of a postnatal human comprising the steps of:

25 determining a pattern of sonic variations in alpha rhythm, said pattern comprising a plurality of sequences of tones each sequence being repeated at a predetermined tempo; and

transmitting each of said sequences of tones in soundwave form to said human during a predetermined period,

30 wherein a tempo at which each subsequent said sequence of tones is repeated is selected to be increased or decreased during the predetermined period.

13. The method of claim 12 wherein said tones in said pattern of sonic variations are a baseline tone or a tonal variation from said baseline tone.

5 *Sub* 14. The method of claim 12 further comprising the step of:  
storing said pattern of sonic variations in an electronic integrated circuit.

15 15. The method of claim 14 wherein said transmitting step comprises  
transmitting said stored plurality of patterns from said electronic integrated circuit to said  
10 human with a sonic transducer.

15 16. The method of claim 12 wherein said transmitting step comprises positioning  
a transmission means proximate to a forehead of said human and transmitting said  
sequence of tones through the cranial surface to said human.

15

*Sub. B2* 17. A method for improving the cognitive function of a premature baby  
comprising the steps of:

20 determining a pattern of sonic variations, said pattern-comprising a plurality of  
sequences of tones, each sequence being repeated at a predetermined tempo; and  
transmitting each of said sequences of tones in soundwave form to said premature  
baby during a predetermined period,  
wherein a tempo at which each subsequent said sequence of tones is repeated is  
selected to be increased during the predetermined period.

25 18. The method of claim 17 wherein said tones in said pattern of sonic variations  
are a baseline tone or a tonal variation from said baseline tone.

30 *Sub* 19. The method of claim 17 further comprising the step of:  
storing said pattern of sonic variations in an electronic integrated circuit.

Sub  
p1 20. The method of claim 19 wherein said transmitting step comprises transmitting said stored plurality of patterns from said electronic integrated circuit to said premature baby with a sonic transducer.

5 21. The method of claim 17 wherein said transmitting step comprises positioning means for a transmission means proximate to said premature baby on a hospital incubator and transmitting said sequence of tones through or from a wall of said hospital incubator.

10 22. A system for increasing cognitive function of a fetus in utero in a woman comprising:

means for determining a pattern of sonic variations, said pattern comprising a plurality of sequences of tones, each sequence being repeated at a predetermined tempo;

means for selecting each of said sequences of tones to be transmitted at a predetermined time during the term of pregnancy; and

15 means for transmitting each of said sequences of tones in soundwave form to said fetus during different periods within the term of the pregnancy.

23. The system of claim 22 wherein a tempo at which each subsequent said sequence of tones is repeated is selected to be increased during the term of the pregnancy.

20 24. The system of claim 22 further comprising:  
means for determining an in utero maternal baseline tone.

25 25. The system of claim 22 further comprising:  
means for recording sounds from a womb of said woman; and  
means for determining a maternal baseline from said recorded sounds.

26. The system of claim 24 wherein each of said tones in said sequence of tones is said in utero maternal baseline tone.

27. The system of claim 24 wherein each of said tones in said baseline tone is said in utero maternal baseline tone or a tonal variation from said in utero maternal baseline tone.

5 28. The system of claim 25 wherein said pattern of sonic variations is determined by adjusting a tone of a digital sampling of said recorded sounds.

29. The system of claim 28 further comprising:  
means for comparing said pattern of sonic variations received at the womb wall  
10 after transmission to said fetus with said transmitted pattern of sonic variations.

30. The system of claim 22 further comprising:  
means for storing said pattern of sonic variations in an electronic integrated  
circuit.

15 31. The system of claim 22 further comprising:  
means for positioning said transmission means proximate to said woman's  
abdomen and transmitting said sequence of tones through an abdominal wall of said  
woman to said fetus.

20

Sub. B3 32. A system for adjusting cognitive function of a postnatal human comprising:  
means for determining a pattern of sonic variations, said pattern comprising a  
plurality of sequences of tones, each sequence being repeated at a predetermined tempo;  
means for selecting each of said sequences of tones to be transmitted at a  
25 predetermined time during a predetermined period; and  
means for transmitting each of said sequences of tones in soundwave form to said  
human during said predetermined period.

30

Sub  
A3 33. The system of claim 32 wherein said tones in said pattern of sonic variations  
are a baseline tone or a tonal variation from said baseline tone in which subsequent  
sequences increase or decrease in tempo.

34  
DI

34. The system of claim 32 further comprising:  
means for storing said pattern of sonic variations in an electronic integrated circuit.

5

35. The system of claim 34 wherein means for transmitting comprises said stored plurality of patterns from said electronic integrated circuit to said human with a sonic transducer.

10

Sub  
A4

36. The system of claim 32 further comprising:  
means for positioning a transmission means proximate to a forehead of said human and transmitting said sequence of tones through the cranial surface to said human.

15

37. A system for increasing cognitive function of a premature baby comprising:  
means for determining a pattern of sonic variations, said pattern comprising a plurality of sequences of tones, each sequence being repeated at a predetermined tempo;  
means for selecting each of said sequences of tones to be transmitted at a predetermined time; and

20

means for transmitting each of said sequences of tones in soundwave form to said fetus during different periods within the term of the pregnancy.

38  
DI

38. The system of claim 37 wherein said tones in said pattern of sonic variations are a baseline tone or a tonal variation from said baseline tone in which subsequent sequences increase in tempo.

25

39. The system of claim 37 further comprising:  
means for storing said pattern of sonic variations in an electronic integrated circuit.

40. The system of claim 39 wherein said means for transmitting comprises transmitting said stored plurality of patterns from said electronic integrated circuit to said premature baby with a sonic transducer.

5 41. The system of claim 37 further comprising:  
means for transmission means proximate to said premature baby on a hospital incubator and transmitting said sequence of tones through or from said hospital incubator.

10 42. A method for improving cognitive function of a fetus in utero in a woman;  
comprising the steps of:  
determining a pattern of sonic variations, said pattern comprising a plurality of  
sequences of tones, each sequence being repeated at a predetermined tempo;  
determining an in utero maternal baseline tone, each of said tones in said baseline  
tone is said in utero maternal baseline tone or a tonal variation from said in utero  
15 maternal baseline tone; and  
transmitting each of said sequences of tones in soundwave form to said fetus  
during different periods within the term of the pregnancy,  
wherein said tonal variations of each subsequent said sequence of tones is selected  
to be increased during the term of the pregnancy.

20

Add  
a2